

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of enhancing an audio signal, the method comprising the steps of:

filtering, using a filter unit, the audio signal so as to select a frequency range thereby forming a filtered audio signal;

dividing, using a segmenting unit, the filtered audio signal of the selected frequency range into time segments thereby forming filtered audio signal time-segments, said filtered audio signal time-segments collectively being a replica of the filtered audio signal; and

scaling, using a scaling unit, each of the filtered audio signal time-segments so as to such that the scaled filtered audio signal time-segments collectively re-form the filtered audio signal with an increased increase the sound level of the filtered audio signal,

wherein the time segments are defined by zero crossings of the filtered audio signal.

2. (Previously Presented) The method as claimed in claim 1, wherein each time segment is defined by two consecutive zero crossings of the filtered audio signal.

3. (Previously Presented) The method as claimed in claim 1, wherein the step of scaling the audio signal involves a distinct scaling factor for each time segment.

4. (Previously Presented) The method as claimed in claim 1, wherein the step of scaling involves a scaling factor which is constant for each time segment.

5. (Previously Presented) The method as claimed in claim 1, wherein the step of scaling involves a scaling factor which varies with the amplitude of the filtered audio signal.

6. (Previously Presented) The method as claimed in claim 5, wherein the step of scaling involves a non-linear scaling factor involving a quadratic or cubic function.

7. (Previously Presented) The method as claimed in claim 1, wherein said method further comprises the step of:

combining, in a combination unit, the scaled filtered audio signal segments of the selected frequency range and the remainder of the audio signal not in the selected frequency range, thereby forming a combined audio signal.

8. (Previously Presented) The method as claimed in claim 7, wherein said method further comprises the steps of:

comparing, using a comparator, an amplitude of the combined audio signal with a threshold value; and  
adjusting, using an adjustment unit, the amplitude of the combined audio signal if the threshold is exceeded.

9. (Previously Presented) The method as claimed in claim 8, wherein only the amplitude of the filtered audio signal is adjusted.

10. (Previously Presented) The method as claimed in claim 8, wherein the steps of comparing the amplitude of the combined audio signal and adjusting the amplitude of the combined audio signal is carried out per time segment.

11. (Previously Presented) The method as claimed in claim 1, wherein the selected frequency range is a bass frequency range.

12. (Previously Presented) The method as claimed in claim 1, wherein said method further comprises the step of:

delaying, in a delay unit, any signal components of the audio signal in frequency ranges other than said selected frequency range.

13. (Currently Amended) A device for enhancing an audio signal, the device comprising:

filter means for filtering the audio signal so as to select a frequency range thereby forming a filtered audio signal;

dividing means for dividing the filtered audio signal of the selected frequency range into time-time-segments thereby forming filtered audio signal time-segments, said filtered audio signal time-segments collectively being a replica of the filtered audio signal; and

scaling means for scaling each of the filtered audio signal segments such that the scaled filtered audio signal time-segments collectively re-form the filtered audio signal with an increased~~so as to increase a sound level of the filtered audio signal,~~

wherein the time segments are defined by zero crossings of the filtered audio signal.

14. (Previously Presented) The device as claimed in claim 13, wherein the dividing means defines each time segment by two consecutive zero crossings of the filtered audio signal.

15. (Previously Presented) The device as claimed in claim 13, wherein the scaling means uses a distinct scaling factor for each time segment.

16. (Previously Presented) The device as claimed in claim 13, wherein the scaling means uses a scaling factor which is constant for each time segment.

17. (Previously Presented) The device as claimed in claim 13, wherein the scaling means uses a scaling factor which varies with the amplitude of the filtered audio signal.

18. (Previously Presented) The device as claimed in claim 17, wherein the scaling means uses a non-linear scaling factor involving a quadratic or cubic function.

19. (Previously Presented) The device as claimed in claim 13, wherein said device further comprises:

combining means for combining the scaled filtered audio signal segments and the remainder of the audio signal not in the selected frequency range, thereby forming a combined audio signal.

20. (Previously Presented) The device as claimed in claim 19, wherein said device further comprises:

comparing means for comparing an amplitude of the combined audio signal with a threshold value; and

adjusting means for adjusting the amplitude of the combined audio signal if the threshold is exceeded.

21. (Previously Presented) The device as claimed in claim 20, wherein the adjusting means adjusts only the amplitude of the filtered audio signal.

22. (Previously Presented) The device as claimed in claim 20, wherein the comparing means compares the amplitude of the combined audio signal per time segment, and the adjusting means adjusts the amplitude of the combined audio signal per time segment.

23. (Previously Presented). The device as claimed in claim 13, wherein the selected frequency range is a bass frequency range.

24. (Previously Presented) The device as claimed in claim 13, wherein said device further comprises:

a delay element for delaying signal components of the audio signal in frequency ranges other than said selected frequency range.

25. (Previously Presented) An audio amplifier comprising a device as claimed in claim 13.

26. (Previously Presented) An audio system comprising a device as claimed in claim 13.

27. (Previously Presented) A computer-readable medium having stored thereon a computer program product comprising code enabling a processor to execute the method as claimed in claim 1.